

Species Tag:	48004	Species Name:	O3
Version:	3		Ozone,
Date:	May 1990		ground vibrational
Contributor:	H. M. Pickett		state
Lines Listed:	7089	Q(300.0)=	3553.040
Freq. (GHz) <	8908	Q(225.0)=	2230.489
Max. J:	80	Q(150.0)=	1198.671
LOGSTR0=	-9.8	Q(75.00)=	423.448
LOGSTR1=	-10.0	Q(37.50)=	150.038
Isotope Corr.:	0.0	Q(18.75)=	53.297
Egy. (cm ⁻¹) >	0.0	Q(9.375)=	19.037
μ_a =		A=	106536.24
μ_b =	0.5324	B=	13349.26
μ_c =		C=	11834.36

The ozone spectrum was fitted using the microwave, millimeter, far-infrared, and infrared transitions given in H. M. Pickett *et al.*, 1985, J. Mol. Spect. **110**, 186, and H. M. Pickett *et al.*, 1988, J. Mol. Spect. **128**, 151. The dipole moment is from M. Lichtenstein *et al.*, 1971, J. Mol. Spect. **40**, 10. Line strengths were calculated using a model Hamiltonian in which the ground state and the three fundamentals were coupled with theoretical matrix elements, and infrared transition dipoles were allowed to mix with the permanent dipole. This treatment gives the correct perturbation of the rotational intensities due to centrifugal distortion. The partition includes contributions from all vibrational states.